

General

Title

Lung cancer: proportion of patients with N2 disease who receive curative treatment (radical radiotherapy, radical chemoradiotherapy or surgical resection) who undergo contrast enhanced CT or contrast enhanced MRI prior to start of treatment.

Source(s)

NHS Scotland, Scottish Cancer Taskforce, National Cancer Quality Steering Group. Lung cancer clinical quality performance indicators. Edinburgh (Scotland): Healthcare Improvement Scotland; 2017 Feb. 37 p. [13 references]

Measure Domain

Primary Measure Domain

Clinical Quality Measures: Process

Secondary Measure Domain

Does not apply to this measure

Brief Abstract

Description

This measure is used to assess the proportion of patients with N2 disease who receive curative treatment (radical radiotherapy, radical chemoradiotherapy or surgical resection) who undergo contrast enhanced computed tomography (CT) or contrast enhanced magnetic resonance imaging (MRI) prior to start of treatment.

Note from the National Quality Measures Clearinghouse: This measure is part of the Cancer Quality Performance Indicators (QPIs) collection. For more information, including a complete list of QPI measure sets, please visit the [Healthcare Improvement Scotland Web site](#).

Rationale

Brain metastases are an important prognostic factor in lung cancer patients and the detection of these can influence decisions on appropriate treatment (Chi & Komaki, 2010).

Contrast enhanced computed tomography (CT) is the most common imaging method used to detect brain metastases and has been shown to be as reliable as non-contrast enhanced magnetic resonance imaging (MRI). Contrast enhanced MRI will detect more metastases than contrast enhanced CT but does not detect metastases in a greater number of patients (Scottish Intercollegiate Guidelines Network [SIGN], 2014).

All patients with N2 disease being considered for curative treatment should undergo contrast enhanced head CT or MRI (SIGN, 2014).

Evidence for Rationale

Chi A, Komaki R. Treatment of brain metastasis from lung cancer. *Cancers (Basel)*. 2010 Dec 15;2(4):2100-37. [PubMed](#)

NHS Scotland, Scottish Cancer Taskforce, National Cancer Quality Steering Group. Lung cancer clinical quality performance indicators. Edinburgh (Scotland): Healthcare Improvement Scotland; 2017 Feb. 37 p. [13 references]

Scottish Intercollegiate Guidelines Network (SIGN). Management of lung cancer. A national clinical guideline. Edinburgh (Scotland): Scottish Intercollegiate Guidelines Network (SIGN); 2014 Feb. 67 p. (SIGN publication; no. 137). [318 references]

Primary Health Components

Lung cancer; N2 disease; curative treatment; radical radiotherapy; radical chemoradiotherapy; surgical resection; contrast enhanced computed tomography (CT); contrast enhanced magnetic resonance imaging (MRI)

Denominator Description

All patients with N2 disease who receive curative treatment (radical radiotherapy, radical chemoradiotherapy or surgical resection) (see the related "Denominator Inclusions/Exclusions" field)

Numerator Description

Number of patients with N2 disease who receive curative treatment (radical radiotherapy, radical chemoradiotherapy or surgical resection) who undergo contrast enhanced computed tomography (CT) or contrast enhanced magnetic resonance imaging (MRI) prior to start of treatment (see the related "Numerator Inclusions/Exclusions" field)

Evidence Supporting the Measure

Type of Evidence Supporting the Criterion of Quality for the Measure

A clinical practice guideline or other peer-reviewed synthesis of the clinical research evidence

A formal consensus procedure, involving experts in relevant clinical, methodological, public health and organizational sciences

One or more research studies published in a National Library of Medicine (NLM) indexed, peer-reviewed journal

Additional Information Supporting Need for the Measure

Unspecified

Extent of Measure Testing

The collection of data is piloted on a small number of patient records using a paper data collection form produced by Information Services Division (ISD). The aim is to identify any anomalies or difficulties with data collection prior to full implementation. At least one NHS board in each Regional Cancer Network participates in the pilot.

Evidence for Extent of Measure Testing

NHS Scotland. National cancer quality performance indicators: overview of development process. Edinburgh (Scotland): NHS Scotland; 2012 Dec. 7 p.

State of Use of the Measure

State of Use

Current routine use

Current Use

not defined yet

Application of the Measure in its Current Use

Measurement Setting

Ambulatory/Office-based Care

Ambulatory Procedure/Imaging Center

Hospital Inpatient

Hospital Outpatient

Professionals Involved in Delivery of Health Services

not defined yet

Least Aggregated Level of Services Delivery Addressed

Single Health Care Delivery or Public Health Organizations

Statement of Acceptable Minimum Sample Size

Unspecified

Target Population Age

Unspecified

Target Population Gender

Either male or female

National Strategy for Quality Improvement in Health Care

National Quality Strategy Aim

Better Care

National Quality Strategy Priority

Prevention and Treatment of Leading Causes of Mortality

Institute of Medicine (IOM) National Health Care Quality Report Categories

IOM Care Need

Getting Better

Living with Illness

IOM Domain

Effectiveness

Data Collection for the Measure

Case Finding Period

Unspecified

Denominator Sampling Frame

Patients associated with provider

Denominator (Index) Event or Characteristic

Clinical Condition

Therapeutic Intervention

Denominator Time Window

not defined yet

Denominator Inclusions/Exclusions

Inclusions

All patients with N2 disease who receive curative treatment (radical radiotherapy, radical chemoradiotherapy or surgical resection)

Exclusions

Patients who decline brain imaging

Exclusions/Exceptions

not defined yet

Numerator Inclusions/Exclusions

Inclusions

Number of patients with N2 disease who receive curative treatment (radical radiotherapy, radical chemoradiotherapy or surgical resection) who undergo contrast enhanced computed tomography (CT) or contrast enhanced magnetic resonance imaging (MRI) prior to start of treatment

Exclusions

Patients who decline brain imaging

Numerator Search Strategy

Fixed time period or point in time

Data Source

Electronic health/medical record

Paper medical record

Type of Health State

Does not apply to this measure

Instruments Used and/or Associated with the Measure

Unspecified

Computation of the Measure

Measure Specifies Disaggregation

Does not apply to this measure

Scoring

Rate/Proportion

Interpretation of Score

Desired value is a higher score

Allowance for Patient or Population Factors

not defined yet

Standard of Comparison

not defined yet

Prescriptive Standard

Target: 95%

The tolerance within this target is designed to account for those patients with contraindications due to renal impairment, allergies to contrast media or deemed clinically unsuitable or unable to undergo magnetic resonance imaging (MRI).

Evidence for Prescriptive Standard

NHS Scotland, Scottish Cancer Taskforce, National Cancer Quality Steering Group. Lung cancer clinical quality performance indicators. Edinburgh (Scotland): Healthcare Improvement Scotland; 2017 Feb. 37 p. [13 references]

Identifying Information

Original Title

QPI 16 – brain imaging.

Measure Collection Name

Cancer Quality Performance Indicators (QPIs)

Measure Set Name

Lung Cancer

Submitter

NHS Scotland - National Government Agency [Non-U.S.]

Scottish Cancer Taskforce - National Government Agency [Non-U.S.]

Developer

NHS Scotland - National Government Agency [Non-U.S.]

Scottish Cancer Taskforce - National Government Agency [Non-U.S.]

Funding Source(s)

Scottish Government

Composition of the Group that Developed the Measure

Lung Cancer QPI Development Group

Financial Disclosures/Other Potential Conflicts of Interest

Unspecified

Adaptation

This measure was not adapted from another source.

Date of Most Current Version in NQMC

2017 Feb

Measure Maintenance

The Cancer Quality Performance Indicators (QPIs) will be kept under regular review and be responsive to changes in clinical practice and emerging evidence.

Date of Next Anticipated Revision

Unspecified

Measure Status

This is the current release of the measure.

Measure Availability

Source document available from the [Healthcare Improvement Scotland Web site](#) .

For more information, contact the Healthcare Improvement Scotland at Gyle Square, 1 South Gyle Crescent, Edinburgh, Scotland EH12 9EB; Phone: 0131 623 4300; E-mail: comments.his@nhs.net; Web site: www.healthcareimprovementscotland.org/ .

Companion Documents

The following is available:

NHS Scotland. National cancer quality performance indicators: overview of development process. Edinburgh (Scotland): NHS Scotland; 2012 Dec. 7 p. This document is available from the [Healthcare Improvement Scotland Web site](#) .

NQMC Status

This NQMC summary was completed by ECRI Institute on June 14, 2017.

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Production

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